

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

CHRIS H. BAJOREK
KOMAG, INC
1710 AUTOMATION PARKWAY
SAN JOSE, CA 95131-1873

TEL: (408) 576-2408
FAX: (408) 576-2260
EMAIL: chris.bajorek@komag.com

PATENTS AND PUBLICATIONS

PATENTS:

1. US 3,840,898: Christopher H. Bajorek, Lubomyr T. Romankiw, and David A. Thompson, "Self-Biased Magnetoresistive Sensor," issued 10/8/74.
2. US 3,860,450: Marc-Aurele Nicolet, Christopher H. Bajorek, Joseph Shao-Ying Feng, "Method of Forming Magnetite Thin Film," issued 1/14/75.
3. US 3,887,944: Christopher H. Bajorek and David A. Thompson, "Method for Eliminating Part of Magnetic Crosstalk in Magnetoresistive Sensors," issued 6/3/75.
4. US 3,996,095: Kie Yeung Ahn, Christopher Henry Bajorek, Robert Rosenberg, and King-Ning Tu, "Epitaxial Process of Forming Ferrite, Fe_3O_4 and Gamma Fe_2O_3 Thin Films on Special Materials," issued 12/7/76.
5. US 4,024,489: Christopher Henry Bajorek, Robert Douglas Hempstead, Sol Krongelb, and Ashok Frank Mayadas, "Magnetoresistive Sandwich Including Sensor Electrically Parallel With Electrical Shunt and Magnetic Biasing Layers," issued 5/17/77.
6. US 4,268,584: Kie Y. Ahn, Christopher H. Bajorek, Paul S. Ho, Robert J. Miller, and John V. Powers, "Nickel-X/Gold/Nickel-X Conductors for Solid State Devices Where X Is Phosphorus, Boron, or Carbon," issued 5/19/81.
7. US 4,328,530: Christopher H. Bajorek, Dudley A. Chance, Chung W. Ho, and David A. Thompson, "Multiple Layer, Ceramic Carrier for High Switching Speed VLSI Chips," issued 5/4/82.
8. US 4,349,862: Christopher H. Bajorek, Dudley A. Chance, and Chung W. Ho, "Capacitive Chip Carrier and Multilayer Ceramic Capacitors," issued 9/14/82.
9. US 4,918,554: Christopher H. Bajorek, Cheng T. Horng, and Edward T. Yen, "Process for Making a Shielded Magnetoresistive Sensor," issued 4/17/90.
10. US 5,264,975: Christopher H. Bajorek, Thomas W. Glaser, Richard Greenberg, Jerr L. Neubauer, and John R. Reidenbach, "Magnetic Disk Storage Device With the Base Provided by an Electronic Module Substrate," issued 11/23/93.
11. US 5,408,373: Christopher H. Bajorek, Robert E. Fontana, Clint D. Snyder, David A. Thompson, Mason L. Williams, Celia E. Yeack-Scranton, "Integrated Transducer-Suspension Assembly for Vertical Recording," issued 4/18/95.

PATENTS (continued):

12. US 5,452,277: Christopher H. Bajorek, Thomas W. Glaser, Klaas B. Klaassen, Charles R. Nielsen, George R. Santana, Gordon J. Smith, and David A. Thompson, "Adaptive System for Optimizing Disk Drive Power Consumption," issued 9/19/95.
13. US 5,465,186: Christopher H. Bajorek, A. David Erpelding, Glen A. Garfunkel, Surya Pattanaik, Neil L. Robertson, and Albert J. Wallash, "Shorted Magnetoresistive Head Leads for Electrical Overstress and Electrostatic Discharge Protection During Manufacture of a Magnetic Storage System," issued 11/7/95.
14. US 5,521,896: Christopher H. Bajorek, Thomas W. Glaser, Klaas B. Klaassen, Charles R. Nielsen, George R. Santana, Gordon J. Smith, David A. Thompson, and Michael L. Workman, "Adaptive System for Optimizing Disk Drive Power Consumption," issued 5/28/96.
15. US 5,544,138: Christopher H. Bajorek, Thomas W. Glaser, Klaas B. Klaassen, Charles R. Nielsen, George R. Santana, Gordon J. Smith, David A. Thompson, and Michael L. Workman, "Adaptive System for Optimizing Disk Drive Power Consumption," issued 8/6/96.
16. US 5,560,097: Christopher H. Bajorek, Robert E. Fontana, Clint D. Snyder, David A. Thompson, Mason L. Williams, Celia E. Yeack-Scranton, "Integrated Transducer-Suspension Assembly for Vertical Recording," issued 10/1/96.
17. *Four additional patent applications in process.*
18. *One case allowed, awaiting issuance.*

PUBLICATIONS:

1. R. Weber, P. E. Tannenwald, and C. H. Bajorek, "Intensities of Spin-wave Resonance Modes in Thin Films," Appl. Phys. Letters, 16, 1, 35-7, (Jan. 1970).
2. R. Weber, P. E. Tannenwald, and C. H. Bajorek, "Frequency Dependence of Spin Wave Resonance Mode Amplitudes in Permalloy Films," Appl. Phys. Letters, 16, 35 (1970).
3. C. H. Bajorek, M-A. Nicolet, and C. H. Wilts, "Preferential Oxidation of Fe in Permalloy Films," Appl. Phys. Letters, 19, 4, 82-4 (Sept. 1971).
4. C. H. Bajorek and C. H. Wilts, "Evidence for Partial Surface Spin Pinning in Ferromagnetic Resonance," J. Appl. Phys., 42, 11, 4324-33 (Oct. 1971).
5. C. H. Bajorek, "Spin Wave Resonance in Ferromagnetic Films (Ferromagnetic Resonance in Ferromagnetic Thin Films)," Ph.D. thesis, California Institute of Tech., Pasadena, CA (1972).

PUBLICATIONS (continued):

6. C. H. Bajorek and C. H. Wilts, "A Comparison of Ferromagnetic Resonance with Magnetic Moment and X-ray Film Thickness Measurements for Thin Permalloy Films," J. Appl. Phys., 43, 8, 3538-42 (Aug. 1972).
7. J. S.-Y. Feng, C. H. Bajorek, and M.-A. Nicolet, "Magnetite Thin Films," IEEE Trans. Mag., Mag-8, 3, 277-8 (Sept. 1972). Presented at 1972 INTERMAG Conference, Kyoto, Japan (April 1972).
8. C. H. Bajorek and E. Pugh, "Ultimate Storage Densities in Magneto-optics and Magnetic Recording," IBM Research RC4153 (1972).
9. C. H. Bajorek, A. T. Pfeiffer, and L. T. Romankiw, "Making Iron Oxide Masks," IBM Tech. Disclosure Bulletin, 15, 5, 1595-6 (Oct. 1972).
10. C. H. Bajorek and A. F. Mayadas, "Reliability of Magnetoresistive Bubble Sensors," AIP Conf. Proc., 10, 1, 212-16 (1972). Presented at 18th Annual Conference on Magnetism and Magnetic Materials, Denver, CO (Nov./Dec. 1972).
11. R. L. Anderson, C. H. Bajorek, and D. A. Thompson, "Numerical Analysis of a Magnetoresistive Transducer for Magnetic Recording Applications," AIP Conf. Proc., 10, 2, 1445-9 (1972). Presented at 18th Annual Conference on Magnetism and Magnetic Materials, Denver, CO (Nov./Dec. 1972).
12. C. H. Bajorek and L. T. Romankiw, "Inductive Read Head," IBM Tech. Disclosure Bulletin, 15, 8, 2658-2659 (Jan. 1973).
13. C. H. Bajorek and D. A. Thompson, "Nonlinear Magnetoresistive Head," IBM Tech. Disclosure Bulletin, 16, 10, 3485-6 (March 1974).
14. C. H. Bajorek, C. Coker, L. T. Romankiw, and D. A. Thompson, "Hand-held Magnetoresistive Transducer," IBM J. Res. and Dev., 18, 6, 541-6 (Nov. 1974).
15. C. H. Bajorek, A. Gangulee, F. M. D'Heurle, and A. F. Mayadas, "Long-term Stability of Magnetoresistive Bubble Detectors," IEEE Trans. on Mag., Mag-10, 848 (1974). Presented at 1974 Digests of the Intermag Conference, Toronto, Ontario, Canada (May 1974).
16. C. H. Bajorek, "Anomalous Low-temperature Ferromagnetic Resonance Behavior of Thin Permalloy Films," J. Appl. Phys., 46, 3, 1376-81 (Mar. 1975).
17. R. A. Pollak and C. H. Bajorek, "Surface Composition and Chemistry of Evaporated Permalloy Films Observed by X-ray Photoemission Spectroscopy and by Auger Electron Spectroscopy. (Air-formed oxide layer characterization)," J. Appl. Phys., 46, 3, 1382-8 (Mar. 1975).
18. C. H. Bajorek, S. Krongelb, L. T. Romankiw, and D. A. Thompson, "An Integrated Magnetoresistive Read, Inductive Write High Density Recording Head," AIP Conf. Proc., 24, 548 (1975).
19. C. H. Bajorek and D. A. Thompson, "Permanent Magnet Films for Biasing or Magnetoresistive Transducers," IEEE Trans. on Mag., Mag-11, 5, 1209-11 (Sept. 1975). Presented at 1975 INTERMAG Conference, London, U.K. (April 1975).

PUBLICATIONS (continued):

20. C. H. Bajorek, M. Brady, E. G. Lean, M. Levanoni, and D. A. Thompson, "Six Acoustic Transducers for Acoustically Scanned Magnetoresistive Sensors," IBM Tech. Disclosure Bulletin, 17, 11, 3498-500 (April 1975).
21. C. H. Bajorek, "Fabrication of Fe_3O_4 Films by Phase Transformation of Sputtered Fe_2O_3 Films," IBM Tech. Disclosure Bulletin, 18, 7, 276 (June 1975).
22. C. H. Bajorek, M. Levanoni, and D. A. Thompson, "Scanning Magnetoresistive Sensors Used in Recording and Bubble Sensing Applications," IBM Tech. Disclosure Bulletin, 18, 7, 274-5 (June 1975).
23. C. H. Bajorek, G. W. Brock, and D. A. Nepela, "Negative Temperature Coefficient Material for MR Element Thermal Noise," IBM Tech. Disclosure Bulletin, 18, 2, 540 (July 1975).
24. P. A. Calcagno, D. A. Thompson, and C. H. Bajorek, "An Apparatus for the Measurement of Inductive and Magnetoresistive Properties of Thin Magnetic Films," IBM Research RC 5335 (1975).
25. A. J. Herrmann, C. H. Bajorek, and D. A. Thompson, "Magnetic Thin Film Characterizer," IBM Research RC 5523 (1975).
26. P. A. Calcagno and C. H. Bajorek, "Creep in Flexible Recording Disks," IBM Research RC 5473 (1975).
27. C. H. Bajorek, S. Krongelb, L. T. Romankiw, and D. A. Thompson, "A Permalloy Current Sensor," IEEE Trans. Mag., Mag-12, 6, 813-15 (Nov. 1976). Presented at MMM-INTERMAG Conference, Pittsburgh, PA (June 1976).
28. M. H. Kryder, C. H. Bajorek, and R. J. Kobliska, "On Spontaneous Nucleation in Field-accessed Bubble Devices," IEEE Trans. on Mag., Mag-12, 4, 346-8 (July 1976).
29. C. H. Bajorek and R. J. Kobliska, "Amorphous Materials for Micrometer and Submicrometer Bubble Domain Technology," IBM J. Res. and Dev., 20, 3, 271-81 (May 1976).
30. P. S. Ho, K. Y. Ahn, and C. H. Bajorek, "Elemental Profiles of Amorphous Gd Co Mo Films on Various Substrates Observed by Auger Electron Spectroscopy," presented at International Conference on Magnetic Bubbles, Eindhoven, The Netherlands (Sept. 1976).
31. D. A. Thompson, L. T. Romankiw, C. H. Bajorek, C. D. Cullum, and S. Krongelb, "Narrow Track Magnetoresistive Recording Head Arrays," presented at MMM-INTERMAG Conference, Pittsburgh, PA (June 1976), and IEEE Trans. on Mag., Mag-12, 6, 723 (Nov. 1976).
32. R. J. Kobliska, A. Gangulee, D. E. Cox, and C. H. Bajorek, "Temperature Dependence of the Magnetic Properties of Amorphous Co-Gd-Mo Thin Films," IEEE Trans. on Mag., Mag-13, 6, 1767-72 (Nov. 1977).
33. C. H. Bajorek, D. A. Thompson, and J. Cocke, "Active Transformers for Off-hook Sensing, in Telephone Applications," IEEE Trans. on Mag., Mag-14, 5, 1062-4 (Sept. 1978).

PUBLICATIONS (continued):

34. C. H. Bajorek and R. D. Hempstead, "Cobalt-chromium Films for Hard Magnetic Biasing of Magnetorestrictive Sensors and for Magnetic Recording Medium," IBM Tech. Disclosure Bulletin, 21, 10, 4239-40 (Mar. 1979).
35. C. H. Bajorek, E. A. Giess, G. E. Keefe, and Y. S. Lin, "Contiguous Disk Bubble Patterns Utilizing K₁," IBM Tech. Disclosure Bulletin, 21, 10, 4258 (Mar. 1979).
36. R. W. Arnold, C. H. Bajorek, S. D. Cheatham, W. McCormick, and R. D. Silkensen, "Wear-resistant Substrates for MR Heads With Good Thermal Conductivity," IBM Tech. Disclosure Bulletin, 22, 5, 2149-50 (Oct. 1979).
37. C. H. Bajorek and D. A. Thompson, "Hall Magnetometer and Multilayered Ceramic Modules," IBM Tech. Disclosure Bulletin, 22, 7, 3005-6 (Dec. 1979).
38. C. H. Bajorek and D. A. Thompson, "Improved Pistons for Cooling Circuit Chip Mounted on Packages," IBM Tech. Disclosure Bulletin, 22, 9, 4259-60 (Feb. 1980).
39. C. H. Bajorek, E. H. Bogardus, T. H. DiStefano, and R. E. Horstmann, "Contactless Field-assist Bonding," IBM Tech. Disclosure Bulletin, 22, 11, 5165-6 (Apr. 1980).
40. C. W. Ho, D. A. Chance, C. H. Bajorek, and R. E. Acosta, "The Thin-Film Module As a High-performance Semiconductor Package," IBM J. of Res. and Dev., 26, 3, 286-96 (May 1982).
41. C. H. Bajorek, D. A. Chance, C. W. Ho, and E. E. Shapiro, "Integrated, Low Inductance, Small Area Capacitors for VLSI Semiconductor Packages," IBM Technical Disclosure Bulletin, 25, 2, 883-8 (July 1982).
42. C. H. Bajorek and C. W. Ho, "Beam-Activated Via Defect Detection (for Chip Carriers)," IBM Technical Disclosure Bulletin, 25, 3A, 1166-8 (Aug. 1982).
43. D. A. Chance, C.-W. Ho, C. H. Bajorek, and M. Sampogna, "A Ceramic Capacitor Substrate for High Speed Switching VLSI Chips," presented at IEEE Proceedings of the 32nd Electronic Components Conference, San Diego, CA (May 1982) and published in IEEE Transactions on Components, Hybrids, and Manufacturing Technology, CHMT-5, 4, 368-74 (1982).
44. Christopher Bajorek, "Contamination Control: Our Future Depends On It." Keynote address at the opening session of the Institute of Environmental Sciences' 31st Annual Technical meeting, Las Vegas, Nevada (April 30, 1985). J. Environmental Sci., 28, 5, 10-14 (1985).
45. P. Chaudhari, C. H. Bajorek, and M. H. Kryder, "Amorphous Gd-Co Alloys for Magnetic Bubble Applications" chapter in book Magnetic Bubbles, 31-89, Academic Press, London, UK (1986).
46. C. Bajorek, "Trends in Recording and Control Technologies and Evolution of Sub-System Architectures for Data Storage," IBM Tech. Report, TR 07.903 (May 1988).
47. Christopher Bajorek, "Magnetic and Optical Devices to Quench Data-Storage Quest," Electronic Design, 86 (1988).

PUBLICATIONS (continued):

48. C. H. Bajorek, "Trends in Recording and Control Technologies and Evolution of Subsystem Architectures for Data Storage," presented at IEEE Proceedings: VLSI and Computer Peripherals. VLSI and Microelectronic Applications in Intelligent Peripherals and Their Interconnection Networks, Hamburg, West Germany (May 1989).
49. D. Wachenschwanz, S. Suzuki, J. Lin, C. H. Bajorek, "Challenges Facing Advanced (G)MR-Compatible Disks," presented at IDEMA Advanced MR Heads and Media Symposium, Santa Clara, CA, (Dec. 1997).
50. D. Wachenschwanz, S. Suzuki, K. Matsubayashi, J. Lin, and C. Bajorek, "The Special Needs of Server-Class Disks," IDEMA Insight, XI, 1 (Jan/Feb. 1998).
51. Christopher H. Bajorek, "Challenges of Media Design for the Next Decade," presented at Diskcon '99, San Jose, CA (Sept. 1999).

CHB:jh
1/8/02